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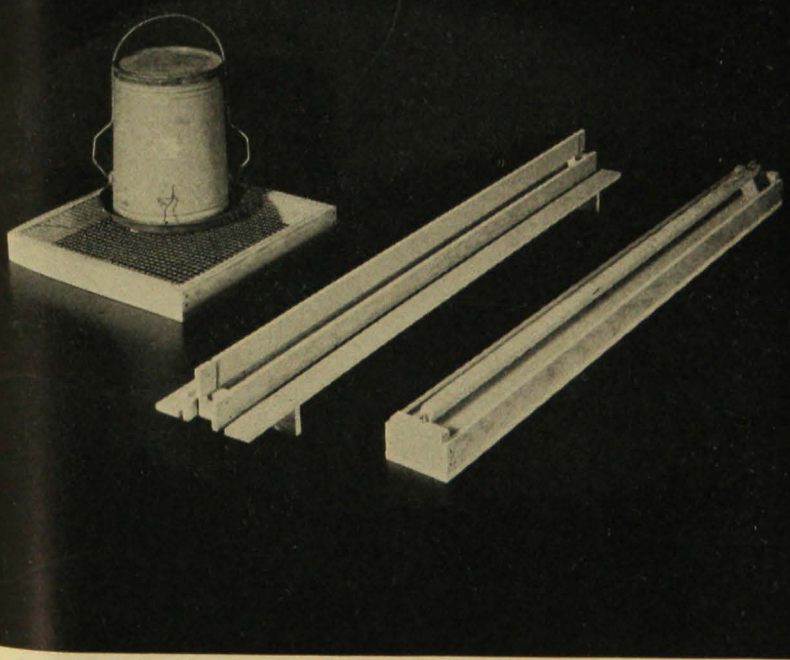
EQUIPMENT FOR CHICKS

by Cora Cooke



THE "LITTLE THINGS" COUNT

It takes more than breeding, feeding, housing, management and care to make success in poultry raising. These are the big things, but some of the minor details are just as necessary and play as big a part in the success or failure of a poultry venture.

Chicks may starve in the midst of plenty—if their feeders are too few or likely to be scratched full of litter.

Chicks may die like flies from coccidiosis—if they are put on old, contaminated ground.

You can run your legs off—if the chicks are moved too far afield the first few weeks.

Hauling feed and water may prove a back-breaking tho necessary task—unless suitable equipment is at hand.

BUT

Some simple pieces of equipment may prove the solution of all these problems and more. Really satisfactory equipment should DO THE WORK, SAVE TIME and NOT COST TOO MUCH.

EQUIPMENT FOR CHICKS brings you ideas used successfully by Minnesota farmers. They are brought together here with a view toward simplifying your work and insuring more satisfying results.

UNIVERSITY OF MINNESOTA
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EQUIPMENT FOR CHICKS

Styles in chick raising change and equipment must change at the same time. Control of disease under modern methods calls for moving the chicks out into the field where they cannot go back to the old ground or run with the adult flock. But to do this requires more equipment and different equipment if the flock is to grow well with a reasonable labor expenditure.

Suitable equipment under these conditions must serve several purposes: Feed, water and care regularly supplied at a minimum of labor and expense; protection of feeders against rain; shade for hot days; control of cannibalism, and many others.

Really good equipment that can be made at home makes for economy as well as efficiency. Better chicks can be raised at a lower cost if such equipment is added.

"RUNSTOP" SUNPORCH

Chicks can be raised on clean ground without the necessity of constant "running" a great distance to give them care during the first few weeks. A sunporch about as large as the brooder house will provide all the out-of-door space needed as long as the chicks require heat. After that chicks can be cared for most easily on range and should be moved to some clean spot not used for poultry for two years or more.

Fig. 1. Sunporch for Sanitation

The floor of the sunporch is of ½ or ¾ inch mesh hardware cloth; sides and top are inclosed with netting to keep the chicks confined, and the whole thing is up off the ground to keep the chicks from coming in contact with droppings and contaminated soil.

FEEDERS FOR ALL SIZES OF CHICKS

Many feeders are needed so that all chicks can eat at one time. Enough feeders will provide for rapid, even growth and prove a check to cannibalism. They should be easy to fill and care for, inexpensive, and as near non-waste as possible. Feeders should be set on stands almost from the beginning to prevent their becoming filled with litter. The stands should be low at first, but raised, as fast as the chicks will use them, to a foot or more.

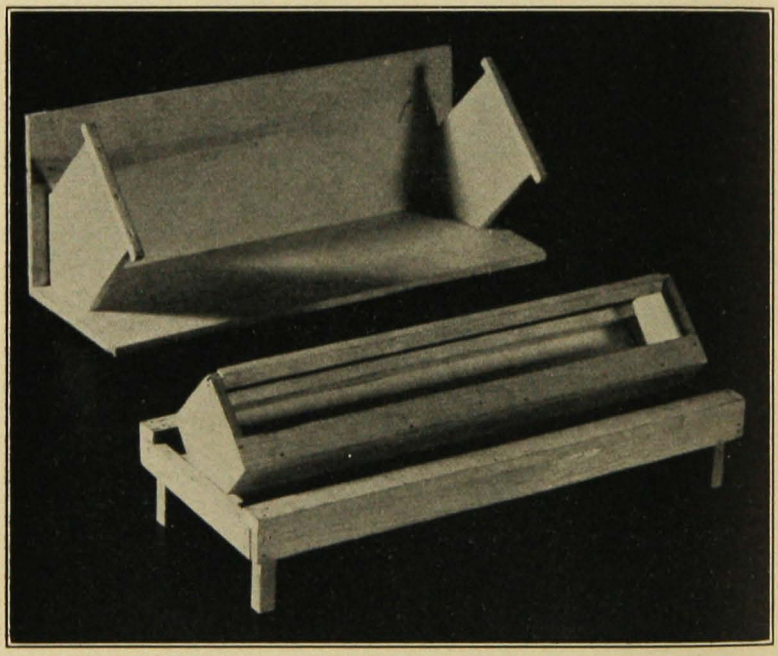

Fig. 2. Range Feeder

1. Platforms for water fountains keep chicks out of filth that collects around fountains. Use ½ inch mesh hardware cloth; 1 × 2-inch material for frame. (See cover page.)

2. Small feeder for first 2 weeks. Use one 4-foot feeder for each

100 chicks. The feeder is made of 4 laths, the center one set between two finishing nails in each end. (See cover page.)

3. Reel feeder—2 weeks to 3 months. Use one 4-foot feeder for each 50 to 75 chicks. (See cover page.)

Material required:

1 board 1″×4″×4′ 4″	3-penny box nails
2 laths	2 screw eyes
1 strip 1″×1″×4′	2 finishing nails

4. Range feeder—3 months to maturity. Use one 5-foot feeder for each 50 pullets.

Bill of material:

Trough—Sides	2 pieces 1″×6″×5′	Stand—Ends	2 pieces 1″×3″×12″
Ends	2 " 1″×6″×6″	Legs	4 " 2″×2″×12″
Tops	2 " 1″×3″×5′	Sides	2 " 1″×3″×5′
Reel	1 piece 1″×2″×5′	Perches	2 " 1″×2″×5′
		Cleats	1 piece 1″×2″×18″

Cover—Roof 4 pieces 1″×8″×5′
Ends 2 " 1″×8″×16″
3-ply roofing 3′×5′

The cover may be used to protect chickens and feed from sun and rain if no shade is provided. In this case the feeder should be set on the ground.

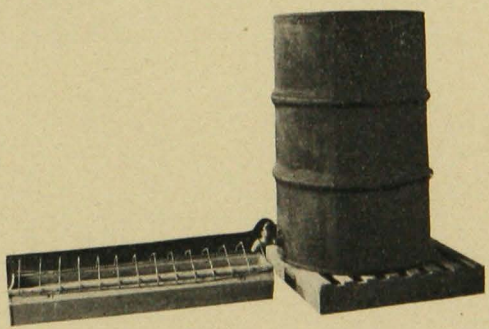

Fig. 3. Range Waterer

RANGE WATERER

A clean oil barrel with faucet and trough will furnish a constant supply of water. Placed on a stone boat, the barrel may be hauled in and filled every other day. Wooden or galvanized troughs may be used. A small float fastened to the faucet which controls the height of the water in the trough and keeps the trough from overflowing is an inexpensive device to prevent formation of puddles around the waterer. If the float is not used, the faucet may be turned just enough to drip, but care must be taken to prevent overflowing, as muddy spots are ideal for the spreading of disease.

SUMMER RANGE SHELTER

When stationary brooder houses are used, or available brooder houses are too small, a range shelter like the one below becomes a most useful piece of equipment. Lightly built, it can be moved readily by two men. Its cost is low, oftentimes meaning a great saving to the person who must provide additional range quarters for pullets.

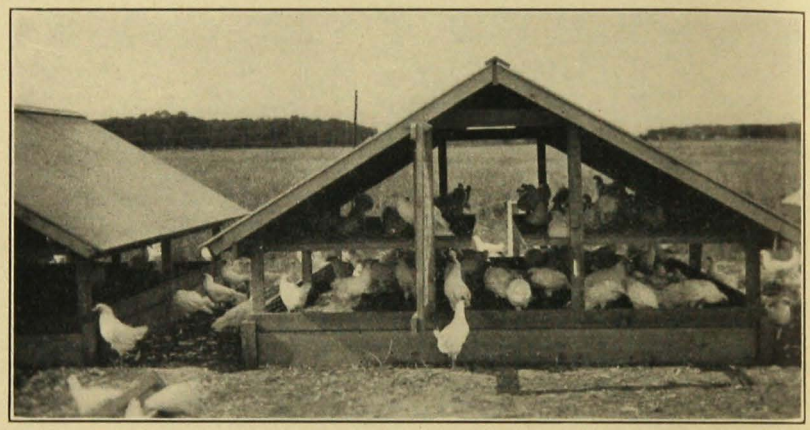

Fig. 4. Summer Range Shelter
Size, 9×10 feet; capacity, 150 mature pullets; cost of material, not more than $20.

Pullets can be moved to the range shelter as soon as they can go without heat, or in early May as soon as they are feathered.

The shelter provides necessary protection against storms and yet assures ample protection. The light lumber used makes it easy to handle.

Construction.—Shelter and wire floor are made separate to facilitate moving and cleaning.

A roof of some fiber wall board also makes for lightness in weight. Most such materials will require painting for waterproofing and also to keep the chickens from picking those portions that can be reached from the roosts. Some hard-finish wall boards are quite impervious to water even without paint. Lumber may be used but would require battening or roofing and would thus be heavier and more expensive.

The center roost supports should be cut into the posts and extend one foot beyond the posts on either end of the shelter to serve as handles for moving. The roosts are 1×2 inches, cut four feet long, and set six inches from each end and one foot apart. This allows for 10 roosts on each side, or 80 running feet. The roosts should be laid flat so as

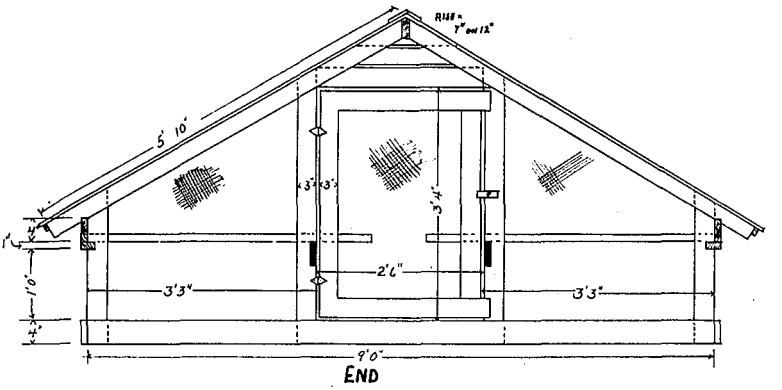

Fig. 5. Range Shelter—End

to lessen the danger of crooked breastbones. A walk one foot wide is left down the center of the house.

One-inch wire netting, one foot wide, is run entirely around the house, cut only to finish the ends and door. The narrow strips can easily be fastened by twisting the outside strands with a nail.

The separate wire floor will add to the ease with which the shelter can be kept sanitary and clean. It is the same size as the shelter and is built entirely separate to facilitate moving and cleaning. It is laid on a frame made of 1×8-inch boards for the four sides and a center brace directly under the walk. Three 1×3-inch cross strips, 2½ feet apart, will support the wire as much as is necessary. Use one-inch wire mesh, 3 feet wide. Three strips of wire 3 feet wide make the nine-foot width without waste.

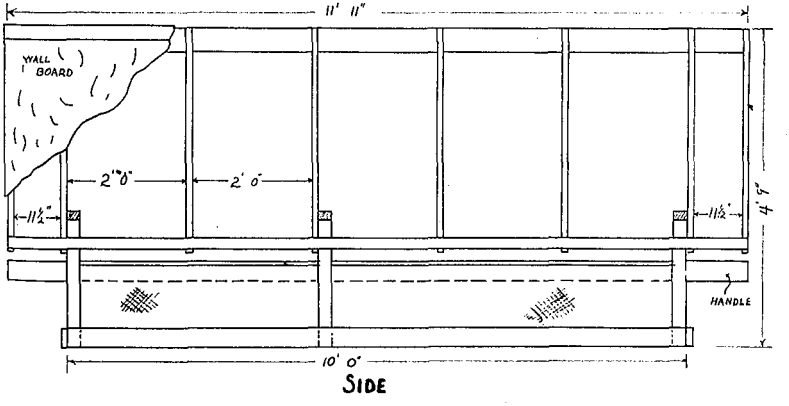

Fig. 6. Range Shelter—Side

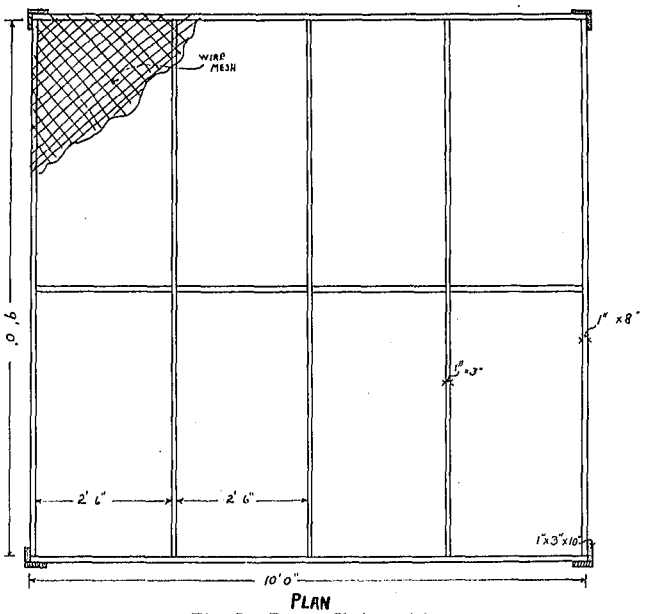

Fig. 7. Range Shelter—Plan

Bill of material for 9′ × 10′ summer range shelter—Use all planed light lumber:

	Detailed Bill	Order Bill
Posts	6—2″×3″×2′	2—2″×3″×14′
Posts	4—2″×3″×4′	
Base Boards	2—1″×4″×9′ 2″	9—1″×4″×12′
Base Boards	2—1″×4″×10′	
Plates	2—1″×4″×11′ 11″	
Roost Supports	2—1″×4″×12′	
Ridge Pole	1—1″×4″×11′ 11″	
Tie Beams	2—1″×4″×2′ 6″	
Saddleboards	2—1″×3″×12′	11—1″×3″×12′
Rafters	16—1″×3″×5′ 10″	
Door	2—1″×3″×3′ 4″	
Door	2—1″×3″×2′ 8″	
Outside Roost Supports	2—1″×2″×10′	10—1″×2″×12′
Roosts	18—1″×2″×4′	
Rafter Spacers	2—1″×2″×12′	

Wall board, 2—6′×12′
Wire—65′—1′ wide, 1″ mesh
Nails—5 lbs. 8 d.
Nails—5 lbs. 8 d. finish
Nails—5 lbs. 1½″ galvanized roofing
Staples—1 lb. wire
Hinges—1 pair 3-in. strap

Floor

Wire 30′—3′ wide 1″ mesh 16 gauge
Boards 5—1″×8″×10′ 3—1″×3″×10′

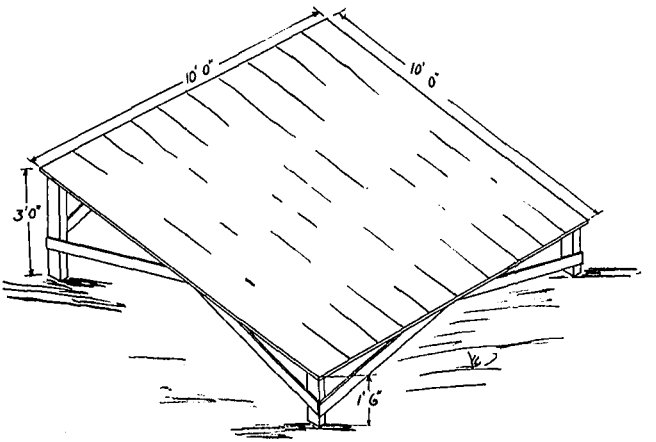

Fig. 8. Shade Shelter

SHADE SHELTER

When pullets are given an open field for range, portable shade shelters become practically essential. They furnish protection for feeders and for chickens so that they continue to eat regardless of weather. They also serve to keep the pullets on their clean range instead of having to go back to the old range for shade.

A-shaped shelters may be used, similar to the range shelter except without the wire netting. Another very satisfactory and extremely simple shade shelter has a shed roof. Such shelters may be made of a size to utilize waste lumber that is available. A convenient size is 10 feet square, 1½ feet from ground at back and 3 feet in front. Two-by-four's are used for corner posts, braced to give strength. The roof is of boards and battens. Feeders and fountains should be placed underneath, and the shelter should be moved often to prevent a heavy accumulation of droppings.

RUN-WAY TO BROODER HOUSE

If chicks are placed on clean range from the beginning, a gently sloping run-way from the ground to their exit door will be found an inducement to them to run in and out. The run-way should be so built as not to permit the chicks to gather under or back of it. Such an arrangement will prevent many a serious loss from sudden storms or from chilling.

ROOST PLATFORM

Chickens can be taught to roost readily and without crowding if a sloping roost platform, covered with netting, is used. The platform closes off the corners and keeps chicks from crowding underneath the roosts. The roosts are 1×2 inches, laid flat, and the netting, one-inch mesh.

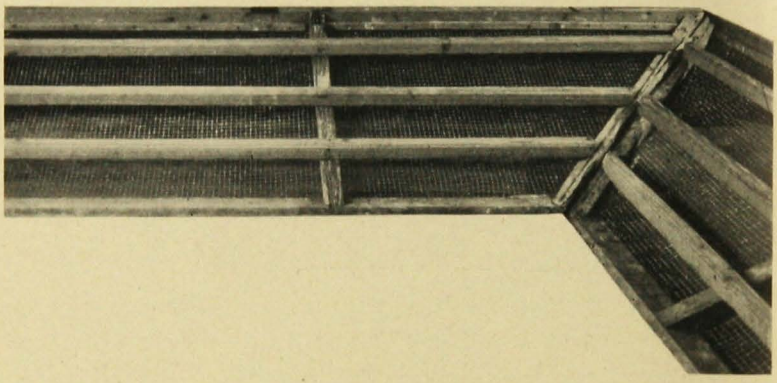

Fig. 9. Roost Platform

TRAP DOOR

Pullets need to be closed in at night as a protection against marauders. Yet, unless they are allowed out as soon as it is light in the morning, much trouble from cannibalism may arise. An automatic chick door can easily be made which will permit the pullets to run out whenever they desire.

The door is 10 inches high and 12 inches long. It is hinged at the bottom by a piece of No. 9 wire, nailed to the door and to the outside of the house with staples. A 1×2-inch cleat is nailed on the outside of the door at the top for a weight. A piece 1″×2″×12″ is nailed to the outside of the house just above the door. The door is hung at a slight incline. A latch stick 24 inches long is hung over the door. When the pullets jump on the latch, the door is immediately released and opens.

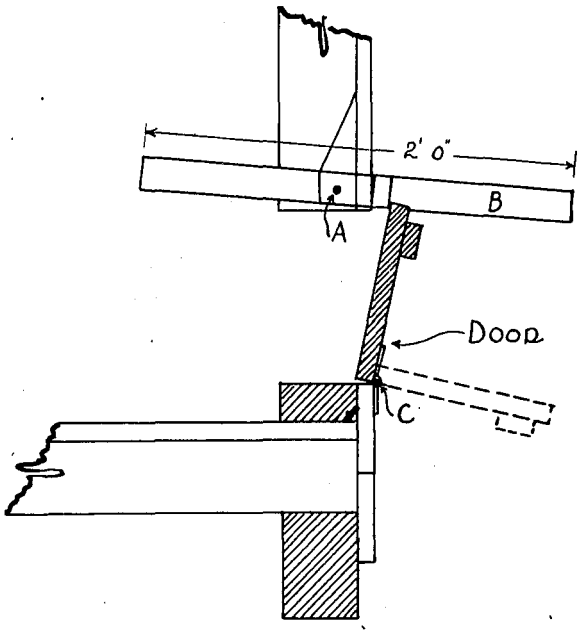

Fig. 10. Automatic Chick Door to Prevent Cannibalism on the Range
(A) Ten-penny nail used for hinge for latch stick. (B) Latch stick 24 inches long. (C) Door hinged at bottom with No. 9 wire.

RANGE FEED BINS

Large, water-tight bins on skids will often be found a convenience for those who have large flocks of pullets on a distant range. Such a bin can hold a large supply of mash and of scratch feed, thus reducing to a minimum the daily hauling and carrying.